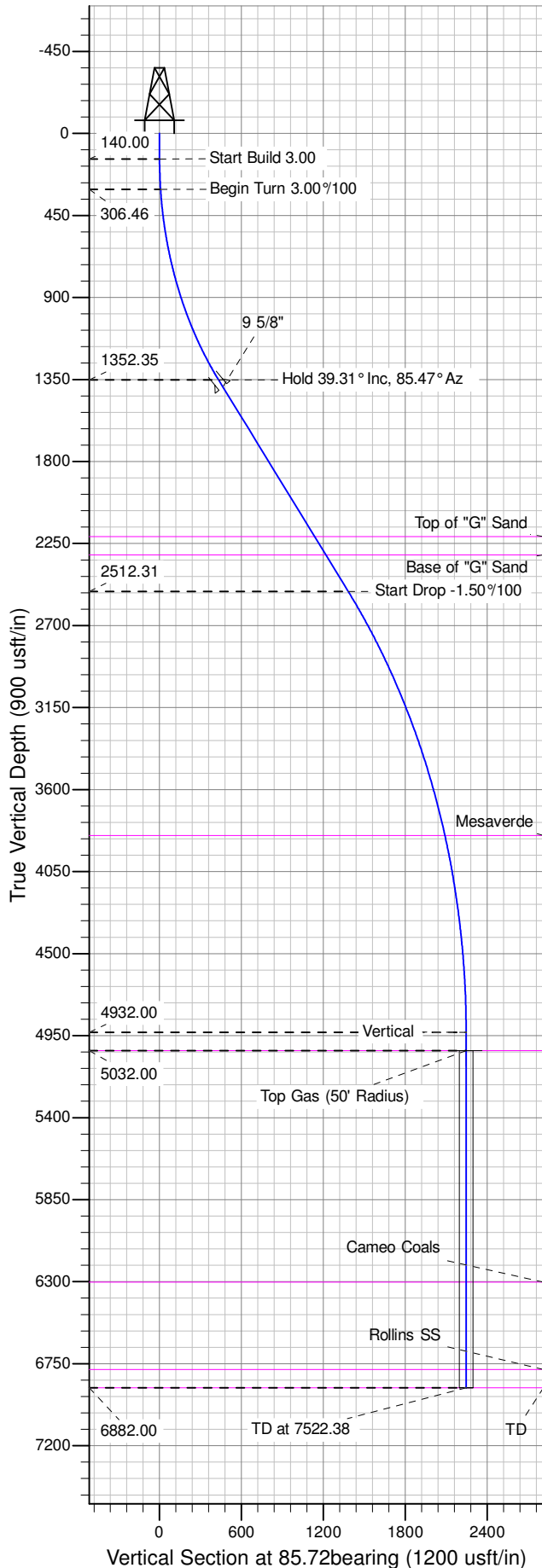
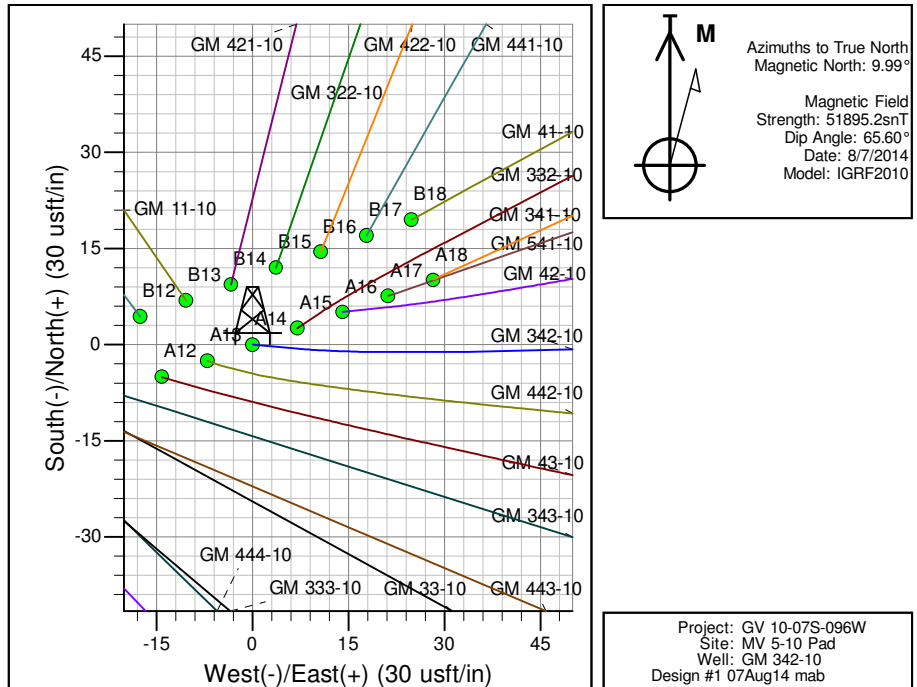
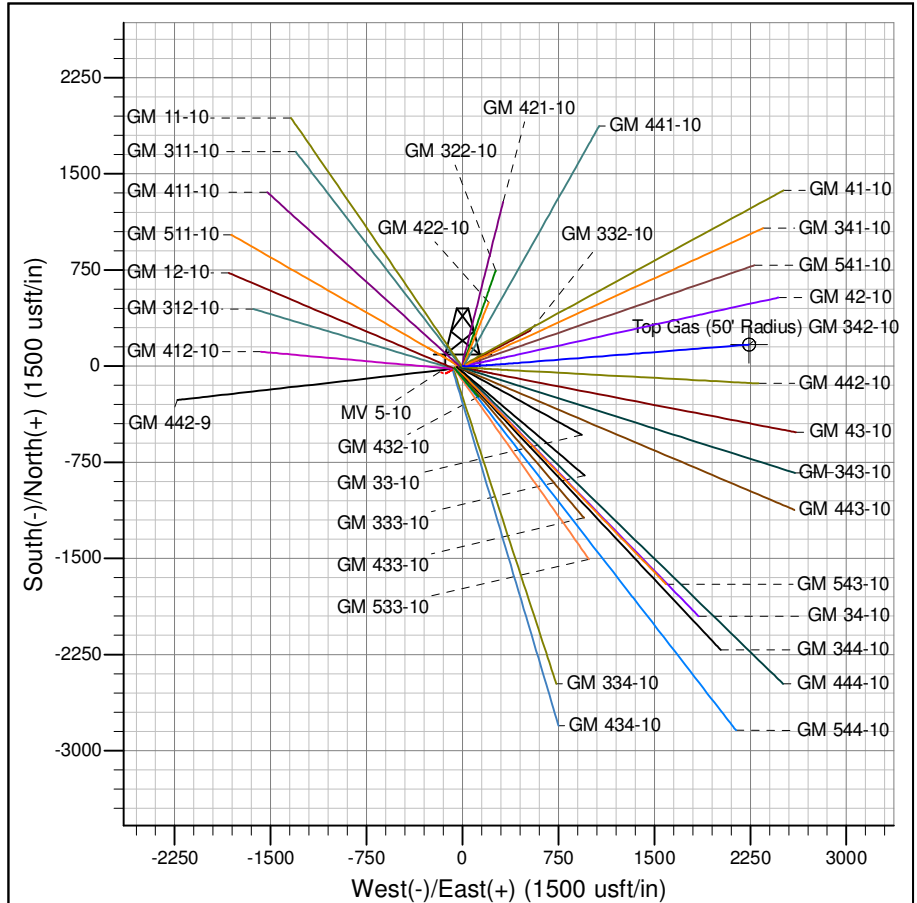




Well Name: GM 342-10  
Surface Location: MV 5-10 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 6148.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1600370.31186 2266960.09913 39.45303 -108.09635 A14  
KELLY BUSHING @ 6174.00usft (Nabors (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
140.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build	3.00
306.46	306.67	5.00	95.00	-0.63	7.24	7.17	7.27	Begin Turn	3.00%/100
1352.35	1452.81	39.31	85.47	24.42	431.71	432.32	432.61	Hold	39.31° Inc, 85.47° Az
2512.31	2951.92	39.31	85.47	99.36	1378.40	1381.97	1382.27	Start Drop	-1.50%/100
4932.00	5572.38	0.00	0.00	167.55	2239.86	2246.12	2246.42	Vertical	
5032.00	5672.38	0.00	0.00	167.55	2239.86	2246.12	2246.42	Top Gas	
6882.00	7522.38	0.00	0.00	167.55	2239.86	2246.12	2246.42	TD at	7522.38



# **PICEANCE VLY NAD 83**

**GV 10-07S-096W**

**MV 5-10 Pad**

**GM 342-10 - Slot A14**

**Wellbore #1**

**Plan: Design #1 07Aug14 mab**

## **Standard Planning Report - Geographic**

**13 October, 2014**

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 342-10 - Slot A14
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 342-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 mab		

<b>Project</b>	GV 10-07S-096W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		Using geodetic scale factor

<b>Site</b>	MV 5-10 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,600,354.00000 usft	<b>Latitude:</b> 39.45298
<b>From:</b> Map		<b>Easting:</b>	2,266,910.20000 usft	<b>Longitude:</b> -108.09653
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.64 °

<b>Well</b>	GM 342-10 - Slot A14			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,600,370.31186 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,266,960.09913 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	0.00 usft
			<b>Ground Level:</b>	6,148.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	8/7/2014	9.99	65.60	51,895

<b>Design</b>	Design #1 07Aug14 mab			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (bearing)</b>
	0.00	0.00	0.00	85.72

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	
306.67	5.00	95.00	306.46	-0.63	7.24	3.00	3.00	0.00	95.00	
1,452.81	39.31	85.47	1,352.35	24.42	431.71	3.00	2.99	-0.83	-10.70	
2,951.92	39.31	85.47	2,512.31	99.36	1,378.40	0.00	0.00	0.00	0.00	
5,572.38	0.00	0.00	4,932.00	167.55	2,239.86	1.50	-1.50	0.00	180.00	
7,522.38	0.00	0.00	6,882.00	167.55	2,239.86	0.00	0.00	0.00	0.00	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 342-10 - Slot A14
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 342-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 mab		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	1,600,370.31186	2,266,960.09913	39.45303	-108.09636	
140.00	0.00	0.00	140.00	0.00	0.00	1,600,370.31186	2,266,960.09913	39.45303	-108.09636	
<b>Start Build 3.00</b>										
200.00	1.80	95.00	199.99	-0.08	0.94	1,600,370.20294	2,266,961.03517	39.45303	-108.09635	
306.67	5.00	95.00	306.46	-0.63	7.24	1,600,369.47186	2,266,967.31769	39.45303	-108.09633	
<b>Begin Turn 3.00°/100</b>										
400.00	7.77	91.15	399.20	-1.11	17.60	1,600,368.69448	2,266,977.65993	39.45303	-108.09629	
600.00	13.74	88.13	595.60	-0.61	54.90	1,600,368.13032	2,267,014.95232	39.45303	-108.09616	
800.00	19.73	86.93	787.04	1.97	112.41	1,600,369.07168	2,267,072.51644	39.45303	-108.09596	
1,000.00	25.73	86.27	971.42	6.61	189.52	1,600,371.50827	2,267,149.72161	39.45305	-108.09569	
1,200.00	31.73	85.84	1,146.72	13.26	285.37	1,600,375.41337	2,267,245.72193	39.45306	-108.09535	
1,400.00	37.72	85.54	1,311.03	21.84	398.92	1,600,380.74421	2,267,359.46563	39.45309	-108.09494	
1,452.81	39.31	85.47	1,352.35	24.42	431.71	1,600,382.38267	2,267,392.30653	39.45310	-108.09483	
<b>Hold 39.31° Inc, 85.47° Az</b>										
1,502.81	39.31	85.47	1,391.04	26.92	463.28	1,600,383.97888	2,267,423.94017	39.45310	-108.09472	
<b>9 5/8"</b>										
1,600.00	39.31	85.47	1,466.24	31.78	524.66	1,600,387.08143	2,267,485.42651	39.45312	-108.09450	
1,800.00	39.31	85.47	1,620.99	41.77	650.96	1,600,393.46595	2,267,611.95463	39.45314	-108.09405	
2,000.00	39.31	85.47	1,775.74	51.77	777.26	1,600,399.85046	2,267,738.48274	39.45317	-108.09360	
2,200.00	39.31	85.47	1,930.50	61.77	903.56	1,600,406.23498	2,267,865.01086	39.45320	-108.09316	
2,400.00	39.31	85.47	2,085.25	71.77	1,029.86	1,600,412.61949	2,267,991.53898	39.45323	-108.09271	
2,563.81	39.31	85.47	2,212.00	79.96	1,133.30	1,600,417.84878	2,268,095.17285	39.45325	-108.09234	
<b>Top of "G" Sand</b>										
2,600.00	39.31	85.47	2,240.00	81.77	1,156.16	1,600,419.00401	2,268,118.06709	39.45325	-108.09226	
2,693.05	39.31	85.47	2,312.00	86.42	1,214.92	1,600,421.97441	2,268,176.93430	39.45327	-108.09205	
<b>Base of "G" Sand</b>										
2,800.00	39.31	85.47	2,394.75	91.76	1,282.46	1,600,425.38853	2,268,244.59521	39.45328	-108.09182	
2,951.92	39.31	85.47	2,512.31	99.36	1,378.40	1,600,430.23833	2,268,340.70836	39.45330	-108.09148	
<b>Start Drop -1.50°/100</b>										
3,000.00	38.59	85.47	2,549.70	101.74	1,408.52	1,600,431.76120	2,268,370.88869	39.45331	-108.09137	
3,200.00	35.59	85.47	2,709.23	111.26	1,528.73	1,600,437.83799	2,268,491.31819	39.45333	-108.09094	
3,400.00	32.59	85.47	2,874.85	120.10	1,640.46	1,600,443.48571	2,268,603.24456	39.45336	-108.09055	
3,600.00	29.59	85.47	3,046.11	128.25	1,743.39	1,600,448.68889	2,268,706.36101	39.45338	-108.09018	
3,800.00	26.59	85.47	3,222.54	135.68	1,837.24	1,600,453.43327	2,268,800.38490	39.45340	-108.08985	
4,000.00	23.59	85.47	3,403.65	142.37	1,921.76	1,600,457.70583	2,268,885.05852	39.45342	-108.08955	
4,200.00	20.59	85.47	3,588.95	148.31	1,996.72	1,600,461.49489	2,268,960.14980	39.45344	-108.08929	
4,400.00	17.59	85.47	3,777.94	153.47	2,061.90	1,600,464.79003	2,269,025.45290	39.45345	-108.08906	
4,477.45	16.42	85.47	3,852.00	155.25	2,084.48	1,600,465.93144	2,269,048.07335	39.45345	-108.08898	
<b>Mesaverde</b>										
4,600.00	14.59	85.47	3,970.08	157.84	2,117.14	1,600,467.58224	2,269,080.78884	39.45346	-108.08886	
4,800.00	11.59	85.47	4,164.87	161.41	2,162.28	1,600,469.86386	2,269,126.00595	39.45347	-108.08870	
5,000.00	8.59	85.47	4,361.76	164.17	2,197.19	1,600,471.62864	2,269,160.98028	39.45348	-108.08858	
5,200.00	5.59	85.47	4,560.21	166.12	2,221.78	1,600,472.87174	2,269,185.61598	39.45348	-108.08849	
5,400.00	2.59	85.47	4,759.67	167.25	2,235.98	1,600,473.58975	2,269,199.84552	39.45349	-108.08844	
5,572.38	0.00	0.00	4,932.00	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842	
<b>Vertical</b>										
5,600.00	0.00	0.00	4,959.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842	
5,672.38	0.00	0.00	5,032.00	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842	
<b>Top Gas - Approx. Top Gas</b>										
5,800.00	0.00	0.00	5,159.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842	
6,000.00	0.00	0.00	5,359.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 342-10 - Slot A14
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 342-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 mab		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,200.00	0.00	0.00	5,559.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
6,400.00	0.00	0.00	5,759.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
6,600.00	0.00	0.00	5,959.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
6,800.00	0.00	0.00	6,159.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
6,942.38	0.00	0.00	6,302.00	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
Cameo Coals									
7,000.00	0.00	0.00	6,359.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
7,200.00	0.00	0.00	6,559.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
7,400.00	0.00	0.00	6,759.62	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
7,422.38	0.00	0.00	6,782.00	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
Rollins SS									
7,522.38	0.00	0.00	6,882.00	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
TD at 7522.38									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Top Gas (50' Radius) G1	0.00	0.00	5,032.00	167.55	2,239.86	1,600,473.78574	2,269,203.72957	39.45349	-108.08842
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,502.81	1,391.04	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,563.81	2,212.00	Top of "G" Sand				
2,693.05	2,312.00	Base of "G" Sand				
4,477.45	3,852.00	Mesaverde				
5,672.38	5,032.00	Approx. Top Gas				
6,942.38	6,302.00	Cameo Coals				
7,422.38	6,782.00	Rollins SS				
7,522.38	6,882.00	TD				

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 342-10 - Slot A14
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 342-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 mab		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
140.00	140.00	0.00	0.00	Start Build 3.00
306.67	306.46	-0.63	7.24	Begin Turn 3.00°/100
1,452.81	1,352.35	24.42	431.71	Hold 39.31° Inc, 85.47° Az
2,951.92	2,512.31	99.36	1,378.40	Start Drop -1.50°/100
5,572.38	4,932.00	167.55	2,239.86	Vertical
5,672.38	5,032.00	167.55	2,239.86	Top Gas
7,522.38	6,882.00	167.55	2,239.86	TD at 7522.38